for age and sex. A substantial minority may have psychiatric and social problems in adolescent and later life.

The long-term use of dextroamphetamine in hyperactive children causes a highly significant suppression of growth in weight and height. Tolerances develop to its weight suppressant effects but not in inhibition to height growth. The long-term use of methylphenidate causes a less striking growth suppression only when daily doses over 20 mg are administered. In a follow-up study of adolescents who had received methylphenidate in childhood for minimal brain dysfunction there was no serious interference with growth and height.

Reports conclude that with proper supervision there is a place for the use of drugs as one of the therapeutic methods in treating hyperactive children, but that the possibility of unforeseen long-term consequences indicates caution.

ROBERT A. SOLOW, MD

REFERENCES

Solow RA: Child and adolescent pharmacology in the mid-seventies: Progress or plateau? Psychiatry Dig 37:15-16, 19-23, 27-30, 35-38, Oct 1976

Fish B: Stimulant drug treatment of hyperactive children, *In* Cantwell DP (Ed), The Hyperactive Child. New York, Spectrum Publications, 1975, pp 109-127

Mendelson W, Johnson N, Stewart MA: Hyperactive children seen as teenagers: A followup study. J Nerv Ment Dis 153:273-279, Oct 1971

The Use of Phenothiazines in Children

CHLORPROMAZINE was the first and initially most widely utilized phenothiazine in child psychopharmacology and has been used primarily for psychosis for more than 20 years. Thioridazine has also been a widely used drug. Indications for its use are agitation; hallucinations and delusions; hyperactivity; anxiety; terror and hostility when these are symptoms of psychotic illness; mental retardation, or organic brain damage.

Both drugs are widely used in the treatment of autistic children but because of their sedative effects they might be contraindicated for long-term administration because they seem to have a negative effect on cognitive behavior and learning. They have been of value for school-age schizophrenic children with acute as well as chronic symptomatology but have caused sleepiness and psychomotor retardation even in low doses.

Fluphenazine is highly effective in prepubertal autistic schizophrenic children, and trifluoperazine has proven to be somewhat better than chlorpromazine in autistic children. Ideally, drugs should enhance learning and should not be used as chemical straitjackets for psychotic retarded children. Drowsiness and lethargy are the most common side effects. Abrupt drug withdrawal of psychotropic drugs causes neurologic withdrawal emergent symptoms most of which involve involuntary movements in the trunk, head and ataxia.

ROBERT A. SOLOW, MD

REFERENCES

Claghorn JL: A double-blind comparison of haloperidol (Haldo) and thioridazine (Mellaril) in outpatient children. Curr Ther Res 14:785-789, Dec 1972

Sprague RL, Barnes KR, Werry JS: Methylphenidate and thioridazine: Learning, reaction time, activity and classroom behavior in disturbed children. Am J Orthopsychiatry 40:615-628, Jul 1970

Engelhardt DM, Polizos P, Margolis RA: The drug treatment of childhood psychosis. *In* Smith WL (Ed), Drugs Development and Cerebral Function. Springfield, Illinois, Charles C Thomas, 1972, pp 224-234

Drug Treatment of Affective Illness in Children

THE CONCEPT of depression in young children has not yet found wide acceptance in the United States as it has in other countries. Drugs which have been shown to be effective antidepressants in adults have not been as well evaluated in depressed children, particularly those with psychomotor retardation. The symptoms of irritability, excessive crying, fretfulness and pronounced insomnia are useful criteria for the recognition of endogenous depression in children one to three years old. This condition and a variety of disorders in older children in which depression dominated the clinical features have been treated with tricyclic antidepressants. Depressed children have shown impressive evidence of hyperactivity, enuresis and temper tantrums in addition to the symptoms characteristic of depression. It has been observed that the greater the hyperkinesia and hyperactivity, the more positive were the effects obtained from the use of tricyclic antidepressants. Imipramine has been administered starting with 10 mg and increasing by 10 mg every third day until improvement was noted: 300 mg being the maximum dose given. Childhood manic-depressive illness and cyclic alterations of mood that are at a level of clinical significance have been treated with lithium carbonate